

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY
LETTERS PATENT OF THE UNITED STATES IS:

1. A method for operating a flue gas purification
5 plant (10) with at least one absorber chamber (11), in
which CO and NO are simultaneously oxidized by means of
a catalyst in a first absorber (15) according to the
SCONOX principle and the resulting NO₂ is absorbed on
10 the catalyst surface, and in which SO₂ is furthermore
oxidized by means of a catalyst in a second absorber
(14) upstream of the first absorber (15) according to
the SCOSOX principle and the resulting SO₃ is absorbed
on the catalyst surface, in which method the absorber
15 chamber (11) is disconnected from the flue gas stream
in regularly repeating regeneration cycles and
regenerated by means of a regeneration gas containing
hydrogen and/or hydrogen compounds, the two absorbers
(14, 15) of the absorber chamber (11) being regenerated
20 in succession and regeneration gas being injected into
the absorber chamber between the two absorbers (14,
15), characterized in that the section of the absorber
chamber (11) with the absorber to be regenerated later
is first purged with a purge gas before the start of
the regeneration of the absorber which is regenerated
25 first.

2. The method as claimed in claim 1, characterized
in that the regeneration gas is used as the purge gas.

3. The method as claimed in one of claims 1 and 2,
characterized in that the SCOSOX absorber (14) is
30 regenerated first and the SCONOX absorber (15) is
regenerated afterward.

4. The method as claimed in one of claims 1 to 3,
characterized in that the purging is carried out over a
time period of several seconds, in particular between
35 15 and 30 seconds.

5. The method as claimed in one of claims 1 to 4,
characterized in that the absorber chamber (11) is

disconnected from the flue gas stream by means of closable dampers (12, 13) at the input and output of the absorber chamber (11), in that the purging is controlled by inlet and outlet valves (16, 17, 19, 29),
5 and in that the inlet and outlet valves (16, 17, 19, 29) have already been brought into the position necessary for the purging when the dampers (12, 13) are closed.